

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspio.gov

## CORRECTED NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

06/26/2003

IBM CORPORATION
INTELLECTUAL PROPERTY LAW DEPT.
P.O. BOX 218-39-254
YORKTOWN HEIGHTS, NY 10598

	EXAMINER		_

BAKER, PAUL A

ART UNIT CLASS-SUBCLASS

2188

711-115000

DATE MAILED: 06/26/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,213	05/11/2001	Gianfranco Bilardi	YOR920010439US1	7908

TITLE OF INVENTION: SCALABLE MEMORY

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1300	\$300	\$1600	09/16/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT.

PROSECUTION ON THE MERITS IS CLOSED. NEITHER A NOTICE OF ALLOWANCE NOR A CORRECTED NOTICE OF ALLOWANCE IS A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND ANY PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THE THREE MONTH PERIOD BEGINNING ON THE MAILING DATE OF THE PREVIOUSLY-MAILED NOTICE OF ALLOWANCE AND ENDING ON THE DATE DUE SHOWN ON THIS FORM, OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. MAILING OF A CORRECTED NOTICE OF ALLOWANCE DOES NOT CHANGE THE DATE DUE OF THE ISSUE FEE (AND ANY REQUIRED PUBLICATION FEE). IF A REPLY (WITH PAYMENT OF THE ISSUE FEE AND ANY PUBLICATION FEE) WAS FILED IN RESPONSE TO THE PREVIOUSLY-MAILED NOTICE OF ALLOWANCE, THEN NO FURTHER REPLY IS REQUIRED FROM APPLICANT.

All communications regarding this application must include the application number. Please direct all communications prior to issuance to Mail Stop Issue Fee, unless advised to the contrary.



### UNITED STATES PATENT AND TRADEMARK OFFICE

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P.O. BOX 218-39-254		ART UNIT	PAPER NUMBER		
YORKTOWN HE	IGHTS, NY 10598		2188	-	
			DATE MAILED: 06/26/2003		

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The patent term adjustment to date is 0 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 0 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



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THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
  - □ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents Alexandria, Virginia 22313-1450

(703)746-4000

maintenance fee notifications.

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee politications. CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block I) Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 06/16/2003 IBM CORPORATION INTELLECTUAL PROPERTY LAW DEPT. Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below. P.O. BOX 218-39-254 YORKTOWN HEIGHTS, NY 10598 (Depositor's name) (Signature (Date APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/854 213 05/11/2001 Gianfranco Bilardi YOR920010439US1 7908 TITLE OF INVENTION: SCALABLE MEMORY APPLN. TYPE SMALL ENTITY **ISSUE FEE** PUBLICATION FEE TOTAL FEE(S) DUE DATE DUE NO nonprovisional \$1300 \$300 \$1600 09/16/2003 **EXAMINER** ART UNIT CLASS-SUBCLASS BAKER, PAUL A 2188 711-116000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. single firm (having as a member a registered attorney or agent) and the names of up to 2 ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer registered patent attorneys or agents. If no name Number is required. is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent) ☐ individual ☐ corporation or other private group entity ☐ government 4a. The following fee(s) are enclosed: 4b. Payment of Fee(s): ☐ Issue Fee A check in the amount of the fee(s) is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. Publication Fee The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to ☐ Advance Order - # of Copies Deposit Account Number (enclose an extra copy of this form). Commissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. (Authorized Signature) (Date) NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents. Alexandria, Virginia 22313-1450. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



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09/854,213	05/11/2001	Gianfranco Bilardi	Gianfranco Bilardi YOR920010439US1		
7:	590 06/16/2003		EXAMIN	ER	
IBM CORPORATION INTELLECTUAL PROPERTY LAW DEPT.			BAKER, PAUL A		
P.O. BOX 218-39-			ART UNIT	PAPER NUMBER	
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. 7	590 06/16/2003		EXAMIN	ER
IBM CORPORATION INTELLECTUAL PROPERTY LAW DEPT.		BAKER, PAUL A		
P.O. BOX 218-39-	P.O. BOX 218-39-254		ART UNIT	PAPER NUMBER
YORKTOWN HEIGHTS, NY 10598 UNITED STATES			2188 DATE MAILED: 06/16/2003	8

## Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

<u> </u>			7			
	Application No.	Applicant(s)				
Nation of Allowability	09/854,213	BILARDI ET AL.				
Notice of Allowability	Examiner	Art Unit				
	Paul A Baker	2188				
The MAILING DATE of this communication apper All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI- of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication IGHTS. This application is subject to	plication. If not included will be mailed in due course. <b>THIS</b>	i tive			
1. This communication is responsive to <u>ammendment filed 27</u>	<u><sup>7</sup> March 2003</u> .					
2. The allowed claim(s) is/are <u>1-6</u> .						
3. The drawings filed on <u>28 August 2001</u> are accepted by the						
<ul> <li>4. ☐ Acknowledgment is made of a claim for foreign priority und</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> </ul>	ler 35 U.S.C. § 119(a)-(d) or (f).					
<ol> <li>Certified copies of the priority documents have</li> </ol>	been received.					
2.   Certified copies of the priority documents have	been received in Application No	·				
<ol> <li>Copies of the certified copies of the priority doc</li> <li>International Bureau (PCT Rule 17.2(a)).</li> </ol>	cuments have been received in this r	national stage application from the				
* Certified copies not received:						
5. Acknowledgment is made of a claim for domestic priority ur		onal application).				
(a) The translation of the foreign language provisional a	• •					
6. Acknowledgment is made of a claim for domestic priority ur	nder 35 U.S.C. §§ 120 and/or 121.					
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of the second o	this communication to file a reply co	omplying with the requirements note	∍d L <b>E</b> .			
7. A SUBSTITUTE OATH OR DECLARATION must be subminFORMAL PATENT APPLICATION (PTO-152) which gives reas	nitted. Note the attached EXAMINER con(s) why the oath or declaration is	'S AMENDMENT or NOTICE OF deficient.				
<ul> <li>8. ☐ CORRECTED DRAWINGS must be submitted.</li> <li>(a) ☐ including changes required by the Notice of Draftspers</li> <li>1) ☐ hereto or 2) ☐ to Paper No</li> </ul>	son's Patent Drawing Review ( PTO	-948) attached				
(b) ☐ including changes required by the proposed drawing of	correction filed , which has be	een approved by the Examiner.	ļ			
(c) ☐ including changes required by the attached Examiner'						
Identifying indicia such as the application number (see 37 CFR 1. each sheet.						
9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.						
Attachment(s)						
1 Notice of References Cited (PTO-892)		al Patent Application (PTO-152)				
3 Notice of Draftperson's Patent Drawing Review (PTO-948)		ary (PTO-413), Paper No				
<ul> <li>5 Information Disclosure Statements (PTO-1449), Paper No</li> <li>7 Examiner's Comment Regarding Requirement for Deposit</li> </ul>	<del></del>	ndment/Comment ement of Reasons for Allowance				
of Biological Material	9 Other .	Ment of Reasons for Allowance				

Application/Control Number: 09/854,213

Art Unit: 2188

#### **DETAILED ACTION**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows: Title has been changed to "Scalable Memory"

## Allowable Subject Matter

Claims 1-6 are allowed.

The following is an examiner's statement of reasons for allowance: Cox US

Patent 5,357,621 and Soderquist US Patent 6,425,064 represent the closest prior art of record. Soderquist has a serial memory configuration with buffers and control logic (memory controller) on each module however it does not have dual independent data return paths. Cox provides a motivation for a dual independent data return paths in column 7 lines 24-31. However neither prior art provides a motivation to combine Cox and Soderquist nor would it have been obvious to one of ordinary skill in the art to combine the two since Cox's memory accesses are of a parallel nature as shown in figure 1, top 3 busses and Soderquist is a serial method of access as shown in figure 1. Therefore independent claims 1 and 3 are found allowable of the prior art of record, and claims 2 and 4-6 are allowable as being dependent upon claims 1 and 3 respectively.

Application/Control Number: 09/854,213

Art Unit: 2188

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul A Baker whose telephone number is (703)305-3304. The examiner can normally be reached on M-F 10am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (703)308-1756. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-7238 for regular communications and (703)746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-

3900.

June 16, 2003

SPE TC2100